

SINE/COSINE FIRST QUADRANT  $\sin(0)$  TRIGONOMETRY	SINE/COSINE FIRST QUADRANT  $\sin\left(\frac{\tau}{12}\right)$  TRIGONOMETRY
SINE/COSINE FIRST QUADRANT  $\sin\left(\frac{\tau}{8}\right)$  TRIGONOMETRY	SINE/COSINE FIRST QUADRANT  $\sin\left(\frac{\tau}{6}\right)$  TRIGONOMETRY
SINE/COSINE FIRST QUADRANT  $\sin\left(\frac{\tau}{4}\right)$  TRIGONOMETRY	SINE/COSINE FIRST QUADRANT  $\cos(0)$  TRIGONOMETRY
SINE/COSINE FIRST QUADRANT  $\cos\left(\frac{\tau}{12}\right)$  TRIGONOMETRY	SINE/COSINE FIRST QUADRANT  $\cos\left(\frac{\tau}{8}\right)$  TRIGONOMETRY
SINE/COSINE FIRST QUADRANT  $\cos\left(\frac{\tau}{6}\right)$  TRIGONOMETRY	SINE/COSINE FIRST QUADRANT  $\cos\left(\frac{\tau}{4}\right)$  TRIGONOMETRY

$\frac{1}{2}$ 

0

 $\frac{\sqrt{3}}{2}$  $\frac{\sqrt{2}}{2}$ 

1

1

 $\frac{\sqrt{2}}{2}$  $\frac{\sqrt{3}}{2}$ 

0

 $\frac{1}{2}$

<p>TANGENT/COTANGENT FIRST QUADRANT</p> <p><math>\tan(0)</math></p> <p>TRIGONOMETRY</p>	<p>TANGENT/COTANGENT FIRST QUADRANT</p> <p><math>\tan\left(\frac{\tau}{12}\right)</math></p> <p>TRIGONOMETRY</p>
<p>TANGENT/COTANGENT FIRST QUADRANT</p> <p><math>\tan\left(\frac{\tau}{8}\right)</math></p> <p>TRIGONOMETRY</p>	<p>TANGENT/COTANGENT FIRST QUADRANT</p> <p><math>\tan\left(\frac{\tau}{6}\right)</math></p> <p>TRIGONOMETRY</p>
<p>TANGENT/COTANGENT FIRST QUADRANT</p> <p><math>\tan\left(\frac{\tau}{4}\right)</math></p> <p>TRIGONOMETRY</p>	<p>TANGENT/COTANGENT FIRST QUADRANT</p> <p><math>\cot(0)</math></p> <p>TRIGONOMETRY</p>
<p>TANGENT/COTANGENT FIRST QUADRANT</p> <p><math>\cot\left(\frac{\tau}{12}\right)</math></p> <p>TRIGONOMETRY</p>	<p>TANGENT/COTANGENT FIRST QUADRANT</p> <p><math>\cot\left(\frac{\tau}{8}\right)</math></p> <p>TRIGONOMETRY</p>
<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\cot\left(\frac{\tau}{6}\right)</math></p> <p>TRIGONOMETRY</p>	<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\cot\left(\frac{\tau}{4}\right)</math></p> <p>TRIGONOMETRY</p>

$\frac{1}{\sqrt{3}}$ or $\frac{\sqrt{3}}{3}$ $\tan(\tau/12) = \frac{\sin(\tau/12)}{\cos(\tau/12)} = \frac{1/2}{\sqrt{3}/2} = \frac{1}{\sqrt{3}}$	0 $\tan(0) = \frac{\sin(0)}{\cos(0)} = 0$
$\sqrt{3}$ $\tan(\tau/6) = \frac{\sin(\tau/6)}{\cos(\tau/6)} = \frac{\sqrt{3}/2}{1/2} = \sqrt{3}$	1 $\tan(\tau/8) = \frac{\sin(\tau/8)}{\cos(\tau/8)} = \frac{\sqrt{2}/2}{\sqrt{2}/2} = 1$
UNDEFINED $\cot(0) = \frac{\cos(0)}{\sin(0)} = \frac{1}{0}$ undefined	UNDEFINED $\tan(\tau/4) = \frac{\sin(\tau/4)}{\cos(\tau/4)} = \frac{1}{0}$ undefined
$1$ $\cot(\tau/8) = \frac{\cos(\tau/8)}{\sin(\tau/8)} = \frac{\sqrt{2}/2}{\sqrt{2}/2} = 1$	$\cot(\tau/12) = \frac{\cos(\tau/12)}{\sin(\tau/12)} = \frac{\sqrt{3}/2}{1/2} = \sqrt{3}$
0 $\cot(\tau/4) = \frac{\cos(\tau/4)}{\sin(\tau/4)} = \frac{0}{1} = 0$	$\frac{1}{\sqrt{3}}$ or $\frac{\sqrt{3}}{3}$ $\cot(\tau/6) = \frac{\cos(\tau/6)}{\sin(\tau/6)} = \frac{1/2}{\sqrt{3}/2} = \frac{1}{\sqrt{3}}$

<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\sec(0)</math></p> <p>TRIGONOMETRY</p>	<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\sec\left(\frac{\tau}{12}\right)</math></p> <p>TRIGONOMETRY</p>
<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\sec\left(\frac{\tau}{8}\right)</math></p> <p>TRIGONOMETRY</p>	<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\sec\left(\frac{\tau}{6}\right)</math></p> <p>TRIGONOMETRY</p>
<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\sec\left(\frac{\tau}{4}\right)</math></p> <p>TRIGONOMETRY</p>	<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\csc(0)</math></p> <p>TRIGONOMETRY</p>
<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\csc\left(\frac{\tau}{12}\right)</math></p> <p>TRIGONOMETRY</p>	<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\csc\left(\frac{\tau}{8}\right)</math></p> <p>TRIGONOMETRY</p>
<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\csc\left(\frac{\tau}{6}\right)</math></p> <p>TRIGONOMETRY</p>	<p>SECANT/COSECANT FIRST QUADRANT</p> <p><math>\csc\left(\frac{\tau}{4}\right)</math></p> <p>TRIGONOMETRY</p>

$\frac{2}{\sqrt{3}}$ or $\frac{2\sqrt{3}}{3}$ $\sec(\tau/12) = \frac{1}{\cos(\tau/12)} = \frac{1}{\sqrt{3}/2} = \frac{2}{\sqrt{3}}$	$1$ $\sec(0) = \frac{1}{\cos(0)} = \frac{1}{1} = 1$
$2$ $\sec(\tau/6) = \frac{1}{\cos(\tau/6)} = \frac{1}{1/2} = 2$	$\sqrt{2}$ $\sec(\tau/8) = \frac{1}{\cos(\tau/8)} = \frac{1}{\sqrt{2}/2} = \frac{2}{\sqrt{2}} = \frac{2\sqrt{2}}{2} = \sqrt{2}$
$\text{UNDEFINED}$ $\csc(0) = \frac{1}{\sin(0)} = \frac{1}{0}$ undefined	$\text{UNDEFINED}$ $\sec(\tau/4) = \frac{1}{\cos(\tau/4)} = \frac{1}{0}$ undefined
$\sqrt{2}$ $\csc(\tau/8) = \frac{1}{\sin(\tau/8)} = \frac{1}{\sqrt{2}/2} = \frac{2}{\sqrt{2}} = \frac{2\sqrt{2}}{2} = \sqrt{2}$	$2$ $\csc(\tau/12) = \frac{1}{\sin(\tau/12)} = \frac{1}{1/2} = 2$
$1$ $\csc(\tau/4) = \frac{1}{\sin(\tau/4)} = \frac{1}{1} = 1$	$\frac{2}{\sqrt{3}}$ or $\frac{2\sqrt{3}}{3}$ $\csc(\tau/6) = \frac{1}{\sin(\tau/6)} = \frac{1}{\sqrt{3}/2} = \frac{2}{\sqrt{3}}$